

## Listing of Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

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1     1. (previously presented) A method for synchronizing operations in a computer  
2     environment with accompanying audio, said method comprising:

3                 replaying said operations and said accompanying audio in said  
4     computer environment using an event recording, said operations resulting from  
5     processing of recorded user inputs of said event recording, said event recording  
6     including all user inputs to an original computer environment during said event  
7     recording and initial conditions of said original computer environment when said  
8     event recording was initiated;

9                 creating a synchronization point at a common point in said replaying  
10    of said operations and said accompanying audio;

11                 associating said synchronization point with said accompanying audio,  
12    said synchronization point providing a reference point to substantially synchronize  
13    said accompanying audio when said operations are replayed in a replay computer  
14    environment using said recorded user inputs;

15                 detecting said synchronization point during a subsequent replay of said  
16    operations and said accompanying audio in said replay computer environment, said  
17    subsequent replay involving another processing of said recorded user inputs;

18                 comparing said synchronization point with a time value associated  
19    with said another processing of said recorded user inputs;

20                 selectively pausing said subsequent replay of said accompanying audio  
21    if a difference between said synchronization point and said time value exceeds a  
22    predefined amount so that said subsequent replay of said operations can catch up to  
23    said accompanying audio; and

24                   resuming said subsequent replay of said accompanying audio if a  
25   difference between said synchronization point and a current time value does not  
26   exceed a second predefined amount, said current time value being associated with  
27   said another processing of said recorded user inputs.

1   2.        (original) The method of claim 1 wherein said creating of said  
2   synchronization point includes creating said synchronization point in response to a  
3   user command.

1   3.        (original) The method of claim 1 wherein said common point is at a point in  
2   time where there is no audio output during said replaying of said accompanying  
3   audio.

1   4.        (original) The method of claim 1 further comprising obtaining a current time  
2   value associated with said processing of said recorded user inputs, said current time  
3   value corresponding to said synchronization point.

1   5.        (original) The method of claim 1 further comprising saving said  
2   synchronization point in a first file containing said accompanying audio, said first file  
3   being different than a second file containing said recorded user inputs.

1   6.        (original) The method of claim 1 further comprising changing a time value of  
2   said synchronization point in response to a positional change of a marker of said  
3   synchronization point in a timeline.

1   7.        (canceled).

1   8.        (canceled).

1       9. (previously presented) The method of claim 1 wherein said second predefined  
2       amount equals said predefined amount.

1       10. (previously presented) A method for synchronizing operations in a computer  
2       environment with accompanying audio, said method comprising:

3                 replaying said operations in said computer environment, including  
4       replaying said accompanying audio, using an event recording, said operations  
5       resulting from processing of recorded user inputs of said event recording, said event  
6       recording including all user inputs to an original computer environment during said  
7       event recording and initial conditions of said original computer environment when  
8       said event recording was initiated;

9                 detecting a synchronization point during said replaying of said  
10      accompanying audio;

11                 comparing said synchronization point with a time value associated  
12      with said processing of said recorded user inputs;

13                 selectively pausing said replaying of said accompanying audio if a  
14      difference between said synchronization point and said time value exceeds a  
15      predefined amount so that said replaying of said operations can catch up to said  
16      accompanying audio; and

17                 resuming said replaying of said accompanying audio if a difference  
18      between said synchronization point and a current time value does not exceed a second  
19      predefined amount, said current time value being associated with said processing of  
20      said recorded user inputs.

1       11. (canceled).

1       12. (previously presented) The method of claim 10 wherein said second  
2       predefined amount equals said predefined amount.

1       13. (original) The method of claim 10 further comprising displaying said  
2       synchronization point as a marker on a timeline, said timeline including time values  
3       extracted from said recorded user inputs.

1       14. (original) The method of claim 10 further comprising:  
2              creating said synchronization point at a common point in a replay of  
3       said operations and said accompanying audio; and  
4              associating said synchronization point with said accompanying audio.

1       15. (original) The method of claim 14 wherein said creating of said  
2       synchronization point includes creating said synchronization point in response to a  
3       user command.

1       16. (original) The method of claim 14 wherein said common point is at a point in  
2       time where there is no audio output of said accompanying audio.

1       17. (original) The method of claim 14 further comprising saving said  
2       synchronization point in a first file containing said accompanying audio, said first file  
3       being different than a second file containing said recorded user inputs.

1       18. (original) The method of claim 14 further comprising changing a time value of  
2       said synchronization point in response to a positional change of a marker of said  
3       synchronization point in a timeline.

1       19. (previously presented) A storage medium readable by a computer, tangibly  
2       embodying a program of instructions executable by said computer to perform method  
3       steps for synchronizing operations in a computer environment with accompanying  
4       audio, said method comprising:  
5              replaying said operations and said accompanying audio in said  
6       computer environment using an event recording, said operations resulting from

7 processing of recorded user inputs of said event recording, said event recording  
8 including all user inputs to an original computer environment during said event  
9 recording and initial conditions of said original computer environment when said  
10 event recording was initiated;

11                 creating a synchronization point at a common point in said replaying  
12 of said operations and said accompanying audio; and

13                 associating said synchronization point with said accompanying audio,  
14 said synchronization point providing a reference point to substantially synchronize  
15 said accompanying audio when said operations are replayed in a replay computer  
16 environment using said recorded user inputs;

17                 detecting said synchronization point during a subsequent replay of said  
18 operations and said accompanying audio in said replay computer environment, said  
19 subsequent replay involving another processing of said recorded user inputs;

20                 comparing said synchronization point with a time value associated  
21 with said another processing of said recorded user inputs;

22                 selectively pausing said subsequent replay of said accompanying audio  
23 if a difference between said synchronization point and said time value exceeds a  
24 predefined amount so that said subsequent replay of said operations can catch up to  
25 said accompanying audio; and

26                 resuming said subsequent replay of said accompanying audio if a  
27 difference between said synchronization point and a current time value does not  
28 exceed a second predefined amount, said current time value being associated with  
29 said another processing of said recorded user inputs.

1 20. (original) The storage medium of claim 19 wherein said creating of said  
2 synchronization point includes creating said synchronization point in response to a  
3 user command.

1       21. (original) The storage medium of claim 19 wherein said common point is at a  
2       point in time where there is no audio output during said replaying of said  
3       accompanying audio.

1       22. (original) The storage medium of claim 19, wherein said method further  
2       comprises obtaining a current time value associated with said processing of said  
3       recorded user inputs, said current time value corresponding to said synchronization  
4       point.

1       23. (original) The storage medium of claim 19, wherein said method further  
2       comprises saving said synchronization point in a first file containing said  
3       accompanying audio, said first file being different than a second file containing said  
4       recorded user inputs.

1       24. (original) The storage medium of claim 19, wherein said method further  
2       comprises changing a time value of said synchronization point in response to a  
3       positional change of a marker of said synchronization point in a timeline.

1       25. (canceled).

1       26. (canceled).

1       27. (previously presented) The storage medium of claim 19 wherein said second  
2       predefined amount equals said predefined amount.

1       28. (previously presented) A storage medium readable by a computer, tangibly  
2       embodying a program of instructions executable by said computer to perform method  
3       steps for synchronizing operations in a computer environment with accompanying  
4       audio, said method comprising:

5                   replaying said operations in said computer environment, including  
6   replaying said accompanying audio, using an event recording, said operations  
7   resulting from processing of recorded user inputs of said event recording, said event  
8   recording including all user inputs to an original computer environment during said  
9   event recording and initial conditions of said original computer environment when  
10   said event recording was initiated;

11                  detecting a synchronization point during said replaying of said  
12   accompanying audio;

13                  comparing said synchronization point with a time value associated  
14   with said processing of said recorded user inputs;

15                  selectively pausing said replaying of said accompanying audio if a  
16   difference between said synchronization point and said time value exceeds a  
17   predefined amount so that said replaying of said operations can catch up to said  
18   accompanying audio; and

19                  resuming said replaying of said accompanying audio if a difference  
20   between said synchronization point and a current time value does not exceed a second  
21   predefined amount, said current time value being associated with said processing of  
22   said recorded user inputs.

1   29.       (canceled).

1   30.       (previous) The storage medium of claim 28 wherein said second  
2   predefined amount equals said predefined amount.

1   31.       (original) The storage medium of claim 28 further comprising displaying said  
2   synchronization point as a marker on a timeline, said timeline including time values  
3   extracted from said recorded user inputs.

1   32.       (original) The storage medium of claim 28 wherein said method further  
2   comprises:

3                   creating said synchronization point at a common point in a replay of  
4    said operations and said accompanying audio; and  
5                   associating said synchronization point with said accompanying audio.

1    33.    (original) The storage medium of claim 32 wherein said method further  
2    comprises wherein said creating of said synchronization point includes creating said  
3    synchronization point in response to a user command.

1    34.    (original) The storage medium of claim 32 wherein said common point is at a  
2    point in time where there is no audio output of said accompanying audio.

1    35.    (original) The storage medium of claim 32 further comprising saving said  
2    synchronization point in a first file containing said accompanying audio, said first file  
3    being different than a second file containing said recorded user inputs.

1    36.    (original) The storage medium of claim 32 further comprising changing a time  
2    value of said synchronization point in response to a positional change of a marker of  
3    said synchronization point in a timeline.

1    37.    (previously presented) A method for synchronizing operations in a computer  
2    environment with accompanying audio, said method comprising:

3                   replaying said operations in said computer environment, including  
4    replaying said accompanying audio, using an event recording, said operations  
5    resulting from processing of recorded user inputs of said event recording, said event  
6    recording including all user inputs to an original computer environment during said  
7    event recording and initial conditions of said original computer environment when  
8    said event recording was initiated;

9                   detecting a synchronization point during said replaying of said  
10   accompanying audio;

11                 comparing said synchronization point with a time value associated  
12         with said processing of said recorded user inputs;  
13                 selectively pausing said replaying of said accompanying audio if a  
14         difference between said synchronization point and said time value exceeds a  
15         predefined amount so that said replaying of said operations can catch up to said  
16         accompanying audio;  
17                 creating said synchronization point at a common point in a replay of  
18         said operations and said accompanying audio, wherein said common point is at a  
19         point in time where there is no audio output of said accompanying audio; and  
20                 associating said synchronization point with said accompanying audio.

1     38.        (previously presented) A storage medium readable by a computer, tangibly  
2         embodying a program of instructions executable by said computer to perform said  
3         method of claim 37.

1     39.        (previously presented) A method for synchronizing operations in a computer  
2         environment with accompanying audio, said method comprising:

3                 replaying said operations in said computer environment, including  
4         replaying said accompanying audio, using an event recording, said operations  
5         resulting from processing of recorded user inputs of said event recording, said event  
6         recording including all user inputs to an original computer environment during said  
7         event recording and initial conditions of said original computer environment when  
8         said event recording was initiated;

9                 detecting a synchronization point during said replaying of said  
10         accompanying audio;

11                 comparing said synchronization point with a time value associated  
12         with said processing of said recorded user inputs;

13                 selectively pausing said replaying of said accompanying audio if a  
14         difference between said synchronization point and said time value exceeds a

15 predefined amount so that said replaying of said operations can catch up to said  
16 accompanying audio;  
17 creating said synchronization point at a common point in a replay of  
18 said operations and said accompanying audio;  
19 associating said synchronization point with said accompanying audio;  
20 and  
21 saving said synchronization point in a first file containing said  
22 accompanying audio, said first file being different than a second file containing said  
23 recorded user inputs.

1 40. (previously presented) A storage medium readable by a computer, tangibly  
2 embodying a program of instructions executable by said computer to perform said  
3 method of claim 39.

1 41. (previously presented) The method of claim 1, further comprising:  
2 saving said initial conditions of said original computer environment in a log  
3 file when a recording is initiated, said initial conditions corresponding to an initial  
4 state of said original computer environment such that said initial state of said original  
5 computer environment can be automatically recreated on replay using said initial  
6 conditions, said initial state being a particular state from a plurality of possible states  
7 for said original computer environment, said log file including complete definitions of  
8 every control in said original computer environment with respect to said initial state  
9 so that said initial state can be subsequently recreated using said log file;  
10 modifying said initial conditions in said log file in response to user  
11 editing of said log file so that a modified initial state of said original computer  
12 environment is automatically created on replay using modified initial conditions in  
13 said log file when said log file is loaded; and  
14 automatically loading said log file in said computer environment when  
15 a replay is initiated to create said modified initial state in said computer environment  
16 as a starting state for said replay.

1       42. (previously presented) The method of claim 10, further comprising:  
2              saving said initial conditions of said original computer environment in a log  
3       file when a recording is initiated, said initial conditions corresponding to an initial  
4       state of said original computer environment such that said initial state of said original  
5       computer environment can be automatically recreated on replay using said initial  
6       conditions, said initial state being a particular state from a plurality of possible states  
7       for said original computer environment, said log file including complete definitions of  
8       every control in said original computer environment with respect to said initial state  
9       so that said initial state can be subsequently recreated using said log file;  
10              modifying said initial conditions in said log file in response to user  
11       editing of said log file so that a modified initial state of said original computer  
12       environment is automatically created on replay using modified initial conditions in  
13       said log file when said log file is loaded; and  
14              automatically loading said log file in said computer environment when  
15       a replay is initiated to create said modified initial state in said computer environment  
16       as a starting state for said replay.

1       43. (previously presented) The storage medium of claim 19, wherein said method  
2       steps further comprises:  
3              saving said initial conditions of said original computer environment in a log  
4       file when a recording is initiated, said initial conditions corresponding to an initial  
5       state of said original computer environment such that said initial state of said original  
6       computer environment can be automatically recreated on replay using said initial  
7       conditions, said initial state being a particular state from a plurality of possible states  
8       for said original computer environment, said log file including complete definitions of  
9       every control in said original computer environment with respect to said initial state  
10       so that said initial state can be subsequently recreated using said log file;  
11              modifying said initial conditions in said log file in response to user  
12       editing of said log file so that a modified initial state of said original computer

13 environment is automatically created on replay using modified initial conditions in  
14 said log file when said log file is loaded; and  
15 automatically loading said log file in said computer environment when  
16 a replay is initiated to create said modified initial state in said computer environment  
17 as a starting state for said replay.